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EXAMINER
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BEFORE THE BOARD OF PATENT APPEALS AND

INTERFERENCES

Paper No. 21

Application Number: 09/301,749
Filing date: 04/29/1999
Appellants: Ken Powell et al.

Jerome D. Jackson
For Appellants

MAILED

AUG 03 2004

EXAMINER'S ANSWER

GROUP 3600

This is in response to appellants' brief on appeal filed on
10/15/2003.

(1) *Real Party in Interest*

A statement identifying the real party in interest is
contained in the brief.

(2) *Related Appeals and Interferences*

There is none related appeal and interference which
will directly affect or be directly affected by or have a
bearing on the decision in the pending appeal is contained
in the brief.

(3) *Status of Claims*

The statement of the status of claims contained in the
brief is correct.

(4)   Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5)   *Summary of Invention*

The summary of invention contained in the brief is correct.

(6)   Issues

The appellant's statement of the issues in the brief is correct.

(7)   Grouping of Claims

- Appellant's brief includes a statement that:
- Group I: claims 19, and 29 stand or fall together.
- Group II: claims 20-24, 26, 28, and 30-34 stand or fall together.

According to above statement, claim 19 is taken as a representative of Group I, and claim 20 is taken as a representative of Group II.

(8)   *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9)   *Prior Art of Record*

The following is a listing of the prior art of record relied

upon in the rejection of claims under appeal.

-       Powell (US Pat. 5,884,278)

(10)   Grounds of Rejection

The following ground(s) of rejection are applicable to the

appealed claims. The ground(s) for rejection (for pending

claims 19-24, 26, 28-34) are provided here for the

convenience of both Appellants and the Board of Patent

Appeals.

Claim Rejections - 35 USC § 102

A.   Claims 19, and 29 are rejected under 35 U.S.C. § 102(e)

as being anticipate at least by Ken Powell (USP. 5,884,278).

A1.   In regard to claim **19,** it is directed to a system for

operating with portable cards each having a card memory, and

a store having products.

Powell discloses the same system with the same devices

as claimed (see Figs. 3A-3B, 6A-6B), and 14. The claimed "an

electromagnetic detector" was a scanner/bar code reader (see

Powell, Fig.25, and 16:3-4); a card interface was claimed by

Powell's claim 1; Powell teaches "Correlating signals" for

matching a predetermined value to a specific product/item

(e.g., LUT). The claimed system is similar as the system

claimed by Powell Fig.14 since it already has full

capabilities to perform all of these claimed limitations

(i.e., Ken Powell teaches a system for operating with

portable cards each having a card memory, and a store having

a plurality of products, comprising:

-       a plurality of cash register stations (see Fig.14),

each cash register station (see Fig.14, ref.930); including

an electromagnetic detector (see Fig.14, bar code reader

910) for generating first signals corresponding to product

pricing and for generating second signals identifying

products selected for purchase (this is inherent for a bar

code scanner, sequentially scanning a bar code for a product

price then evoking another step of that flow);

-       a card interface for reading third signals

corresponding to product pricing from the card memory of a

portable card (see Fig.14, ref.920);

-       a first processing unit (see Fig.14, ref.930)that

executes a first program in a first memory to correlate

second signals with first signals (see Fig.14, correlating

915 with 911 to obtain 912), wherein the system also

includes a plurality of second processing units (see Fig.14,

ref.952);, each second processing unit executing a second

program in a second memory (see Fig.14, ref.942), to

determine a discount quantity (see 12:13-51) & see step

19060) by correlating second signals from the

electromagnetic detector, in a respective one of the cash

register stations, with the third signals read by the card

interface, in the respective one of the cash register stations).

A2. In regard to claim **29**, it is directed to a system for operating with portable cards each having a card memory, and a store having products. Therefore, this claimed system is the same as the system in claim 19 with an extra task of "determining a total due" in the 1st processing unit, this extra task was disclosed by Powell Fig.19 (refs.19065 and 19060) and similar rationales for rejection of claim 19 are applied, and since Powell teaches a similar system that already have full capabilities to perform all of these pending limitations.

Claim Rejections - 35 USC § 103

B. Claims 20-24, 26, 28, 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ken Powell (US Pat. 5,884,278).

B1. <u>As per claim 20</u>: Powell does not expressly disclose that "each second processing unit is in the respective one of the cash register stations".

However, Powell suggests a configuration that each second processing unit/CPU (see Powell, Fig.14, ref.952) is in a respective cash register station (see Powell, Fig.13, "CHECKOUT STATION 900").

It would be obvious to one of ordinary skill in the art at the time of invention to recognize that Power suggests a

similar claimed configuration in deriving a total balance due for a customer.

B2. <u>As per claim 21</u>: Powell does not expressly disclose that "a central computer that communicates product pricing information with each of the first processing units".

However, Powell suggests a configuration that a central computer (see Fig.13, ref. 800) that communicates product pricing information with each of the first processing unit/CPU 950 (see Powell, Fig.14, ref 930) via bus 1510.

It would be obvious to one of ordinary skill in the art at the time of invention to recognize that Power suggests a similar claimed configuration in deriving a total balance due for a customer.

B3. <u>As per claim 22</u>: Powell does not expressly disclose that "a network including a common computer that communicates pricing information, wherein the first processing unit, of each cash register station, is in the network, and wherein the second processing unit, of each cash register station, receives the second signals from a signal path that excludes the network.".

However; Powell suggests a configuration that a network including a common computer that communicates pricing information via bus 1510, wherein the first processing unit/CPU 950, of each cash register station 930, is in the network (see Fig. 13, ref. 1000), and wherein the second

processing unit/CPU (see Powell, Fig.14, ref.952), of each

cash register station (see Powell, Fig.13, "CHECKOUT STATION

900"), receives the second signals from a signal path that

excludes the network (see Powell, Fig.14, bus 915).

It would be obvious to one of ordinary skill in the art

at the time of invention to recognize that Power suggests a

similar claimed configuration in deriving a total balance

due for a customer.

B4. As per claim 23: Powell does not expressly disclose "a

switch that generates a signal indicating the end of a

checkout transaction for a customer, the switch being

activatable by a clerk, wherein the second processing unit

is in a signal path between the switch and the first

processing unit".

However, it would be obvious to one of ordinary skill

in the art to implement Powell's teaching by adding a switch

after a decision block 19042 to display a "total price" (see

Fig.19, block 19060 and block 19065); said switch would

generate a signal indicating the end of a checkout

transaction for a customer (see Powell, Fig.19, ref.19042),

such switch/button would be activatable by a clerk, wherein

the second processing unit/CPU (see Powell, Fig.14,

ref.952), is in a signal path 915 between a switch for

activating "2-1 MULTIPLEXOR 939" and the first processing

unit/CPU 950 (see Powell's procedure, Fig.19, ref.19042).

The motivation for this action is merely adding "a button" for easily controlled by a clerk.

B5. <u>As per claim 24</u>: Powell does not expressly disclose that "a signal path from the second processing unit to the first processing unit, wherein the second processing unit sends a signal indicating a tender of a discount to the first processing unit, via the signal path".

However, Powell also suggests a configuration where a signal path from the second processing unit 952 to the first processing unit 950, wherein the second processing unit 952 sends a signal indicating a related information about that item (e.g., a related discount) to the first processing unit 950, via a signal path (see Powell, Fig.14, bus 915).

It would be obvious to one of ordinary skill in the art at the time of invention to identify that "related information" in Powell's patent is a tender of a discount because Powell discloses "2-1 MULTIPLEXOR 939" feeding said "related information" to CPU 950 for processing wherein MULTIPLEXOR 939 performs a similar function for an inputted discount.

B6. <u>As per claim 26</u>: Powell does not expressly disclose "a switch that generates a signal indicating the end of a checkout transaction for a customer, the switch being activatable by a clerk, wherein a signal path between the

switch and the first processing unit excludes the second processing unit".

However, it would be obvious to one of ordinary skill in the art to implement Powell's teaching by adding a switch after a decision block 19042 to display a "total price" (see Fig.19, block 19060 and block 19065); said switch would generate a signal indicating the end of a checkout transaction for a customer (see Powell, Fig.19, ref.19042), such switch/button would be activatable by a clerk, wherein the second processing unit/CPU (see Powell, Fig.14, ref.952), is in a signal path 915 between a switch for activating "2-1 MULTIPLEXOR 939" and the first processing unit/CPU 950 (see Powell's procedure, Fig.19, ref.19042). The motivation for this action is merely adding "a button" for easily controlled by a clerk.

Powell does not expressly disclose that "wherein a signal path between the switch and the first processing unit excludes the second processing unit".

However, this is a system claim and the different arrangement for a signal path to exclude a 2nd CPU is not significant concept; one of ordinary skill in the art would utilize Powell's patent to suggest an additional switch/button between "2-1 MULTIPLEXOR 939" and CPU 950 for expressing the claimed idea of a signal path between the

switch and the first processing unit excludes the second

processing unit" in the structure of Fig.14.

It would be obvious to one of ordinary skill in the art

at the time of invention to recognize that Power suggests a

similar claimed configuration in deriving a total balance

due for a customer.

B7. As per claim 28: Powell does not expressly disclose that

"a signal path from the second processing unit to the first

processing unit, wherein the second processing unit sends a

signal indicating a UPC coupon to the first processing unit,

via the signal path".

However, Powell also suggests a configuration where a

signal path from the second processing unit 952 to the first

processing unit 950, wherein the second processing unit 952

sends a signal indicating a related information about that

item (e.g., a related discount) to the first processing unit

950, via a signal path (see Powell, Fig.14, bus 915).

It would be obvious to one of ordinary skill in the art

to identify that "related information" in Powell's patent is

a UPC coupon because Powell discloses "2-1 MULTIPLEXOR 939"

feeding said UPC coupon to CPU 950 for processing wherein

MULTIPLEXOR 939 performs a similar function for an inputted

discount; furthermore, a UPC coupon representing a bar code

is considered as a non-functional descriptive material that

is obvious to function as an "input" to a MULTIPLEXOR 932.

B8. <u>As per claim 30</u>: Powell does not expressly disclose a system wherein a fourth signal corresponds to a discount tender.

However, a discount tender/a formal offer in money is suggested by Power, that amount is determined and is displayed by total price (see Powell, Fig.19, ref. 19053).

It would be obvious to one of ordinary skill in the art to implement Powell's patent by using "a fourth signal corresponds to a discount tender" because the different order in receiving a signal representing this discount amount for calculation is not effecting a total balance due to a purchaser.

B9. <u>As per claim 31</u>: Powell does not expressly disclose that "the peripheral device is an input device".

However, Powell also suggests a configuration wherein a barcode reader is an input device (see Powell, Fig.14, bar code reader 910).

It would be obvious to one of ordinary skill in the art at the time of invention to recognize that Power suggests a peripheral device is an input device because said barcode reader (equivalent to a peripheral device) receives inputs.

B10. <u>As per claim 32</u>: Powell does not expressly disclose that "the signal path carries product identification information".

However, Powell also suggests a configuration that a signal path carries communication signal including product identification information (see Powell, Fig.14, ref. 916).

It would be obvious to one of ordinary skill in the art at the time of invention to recognize that Power already means "the signal path carries product identification information" in deriving a total balance due for a customer. B11. As per claim 33: Powell does not expressly disclose that "the peripheral device is the electromagnetic detector".

However, Powell also suggests a configuration that a barcode reader is the electromagnetic detector (see Powell, "Each checkout station includes a UPC bar code reader that detects an optical (electromagnetic) signal reflected from a UPC symbol").

It would be obvious to one of ordinary skill in the art at the time of invention to recognize that Power suggests a similar means to obtain input from electromagnetic detections.

B12. As per claim 34: Powell does not expressly disclose that "a medium is for a first computer network, wherein a first network-interface, in each cash register station, is an interface to the first computer network".

However, Powell also suggests a configuration of a check-out system including a medium (memory 920 of Fig.14) for a first computer network, wherein a first network-

interface 937, in each cash register station 930, is an interface to the first computer network (see Powell, Fig.14, network interface 937).

The examiner submits that claimed limitations (in claims 20-24, 26, 28, 30-34) were widely used in computer related art specifically in cash registers/check-out stations in retailed stores, claiming a medium that assist communication between 2 components is fundamental.

It would be obvious to one of ordinary skilled in the art at the time of the invention to ascertain essential characteristics of cited reference and, without departing from the spirit and scope thereof, can make modifications of Ken Power's reference to use that system in rearranging structures of a cash register to obtain "total amount due" after subtracting coupon amounts (employing multiple network interfaces at each cash register, and receiving signals from portable cards at each cash register).

(11) Response to Argument:

The applicants state that independent claim 19 represents group I, and dependent claim 20 represents group II; therefore, these 2 claims are analyzed below:

A. As per claim 19: Ken Powell teaches a system for operating with a plurality of portable cards each having a card memory, and a store having a plurality of products, the system comprising:

-      a plurality of cash register stations (see Fig.14,

ref. 930), each cash register station including an

electromagnetic detector (see Fig.14, bar code reader 910

" Each checkout station includes a UPC bar code reader that detects an optical (electromagnetic) signal

reflected from a UPC symbol") for generating first signals

corresponding to product pricing and for generating second

signals identifying products selected for purchase (this is

inherent for a bar code scanner, sequentially scanning a bar

code for a product price then evoking another step of that

flow);

-      a card interface (see Fig.14, ref.915) for reading

third signals corresponding to product pricing from the card

memory (see Fig.14, ref.931) of a portable card (see Fig.14,

ref.920);

-      a first processing unit (see Fig.14, ref.950)that

executes a first program (see Fig.14, ref.943) in a first

memory (see Fig.14, ref.920) to correlate second signals

with first signals e.g., see 12:62-65 – Ken Powell uses

"correlation" of two electronic signals in obtaining an

output signal (see the abstract …allowing the correlation of

coupon redemptions with customer demographic data…", and

10:22-24), wherein the system also includes a plurality of

second processing units (see Fig.14, ref.952); each second

processing unit executing a second program (see Fig.14,

ref.942) in a second memory (see Fig.14, ref.931), to

determine a discount quantity (see 12:13-51) & see step

19060) by correlating second signals from the

electromagnetic detector, in a respective one of the cash

register station 900, with the third signals read by the

card interface, in the respective one of the cash register

station 900.

B. <u>As per claim 20</u>: Ken Powell also suggests a

configuration wherein a system comprising many cash register

stations, wherein each second processing unit (CPU 952) is

in the respective cash register station (see Fig.14,

ref.900).

C.   It is considered that sufficient evidences are provided

from the references of Ken Power (main inventor of this

pending application).

D. The examiner disagrees about a conclusion on page 6,

para.5, that "No reasonable combination of the art of record

suggests this particular combination, including the recited

2nd processing unit and discount quantity" Power suggests

claimed limitations either implicitly or explicitly in cited

prior art.

E. During patent examination, the pending claims must be

given the broadest reasonable interpretation. Reading a

claim in light of the specification, to thereby interpret

limitations explicitly recited in the claim, is quite

different from reading limitations of the specification into

a claim, to thereby narrow the scope of the claim by implicitly adding disclosed limitations which have no express basis in the claim (see *In re Prater*, 162 USPQ 541 (CCPA 1969)).

F.   It is reasonable that a modification of previous Ken Power's invention would be apparent to those skilled in the art at the time of invention without departing from the scope and spirit of that invention because this application mainly claim the rearranging components in order to calculate a total amount due taking into account with signals from coupon amounts. Although cited invention may be described in connection with specific preferred embodiments, it should be understood that its limitations as disclosed should not be limited to such specific embodiments.

For the above reasons, it is believed that the rejections should be sustained.
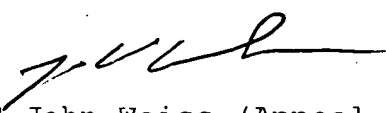
Respectfully submitted,

Cuong H. Nguyen
July 05, 2004

CUONG NGUYEN
PRIMARY EXAMINER

An appeal conference was held on July 01, 2004 with:

Acting SPE Jeff. A. Smith, Art Unit 3625

7/26/04

SPE John Weiss (Appeal Conference Specialist)

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